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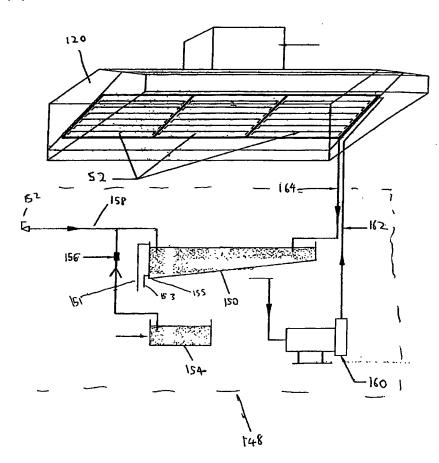
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#### (54) Title: SELF CLEANING FILTER ASSEMBLY AND CIRCULATION SYSTEM



(57) Abstract: There is provided a self cleaning filter assembly for use in an exhaust system, including: a casing for placement in the path of an air flow, the casing containing: a first filter; a second filter; a barrier for placement adjacent to the casing to prevent a cleaning fluid from dripping from the first filter and out from the casing; and a plurality of spray outlets for dispersion of fluid within the casing and onto the filters. The plurality of spray outlets create droplets of the cleaning fluid of a size able to combine with droplets of a contaminant to form combined droplets in the air flow and wherein the first filter and the second filter captures droplets of the contaminant and droplets from the spray outlets. A circulation system for use with the filter assembly is also disclosed.

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